

# Exhibit 1

Expert Report of Dr. Cowan, Ph.D

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**IN THE UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NEW YORK**

NICHOLAS BERGERON AND NICK QUATTROCIOCCHI,  
on behalf of herself and all others similarly situated,

Plaintiff,

Lead Case No. 6:20-cv-06283

vs.

ROCHESTER INSTITUTE OF TECHNOLOGY,

Defendant.

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**EXPERT REPORT OF CHARLES D. COWAN, PH.D.**

**April 29, 2022**

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I. Introduction

1. I have been retained by Anastopoulos Law Firm, LLC and Bursor & Fischer, co-counsel for the proposed class ("Plaintiff") in this action against the Rochester Institute of Technology ("Defendant" or "RIT"). I was asked to evaluate the loss to students enrolled at the main campus at RIT due to switching from in-person, campus-based educational services to on-line only services during the second half of the Spring Semester offered at RIT in 2020.

2. Further, I was asked to quantify the losses incurred by each student, including prejudgment interest, on classes that were switched from in-person, campus-based services to on-line only for students who contracted for educational services at RIT's campus.

3. This report summarizes analyses I conducted and the conclusions I developed based on these analyses. The materials on which I relied for purposes of this report are listed in Exhibit 3.

4. At this point detailed information has been produced only with respect to one of the Plaintiff representatives, Mr. Quattrociocchi (the "Lead Plaintiff").<sup>1</sup> Detailed information similar to that provided for the Lead Plaintiff has not been produced for other class members, including any information on fees. My understanding is that, should the class be certified, this information will be made available in production as part of

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<sup>1</sup> No detailed information has been provided for Mr. Bergeron at this time.

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discovery. In Section III-A, I provide a framework for calculating damages for each member of the class using a single formula and present this calculation for the Lead Plaintiffs.

5. In Section III-B, I provide an estimate of Tuition damages for Undergraduate Students as a whole based on information in Plaintiff's pleadings and information I have been able to gather from public sources, including The National Center of Education Statistics ("NCES") and materials publicly available in RIT's website. I do not offer similar calculations for Graduate Students or with respect to fees because I do not have the necessary information to provide such calculations.

6. Also, I understand that RIT offered classes through the National Technical Institute for the Deaf ("NTID") at the Graduate and Undergraduate level. For purposes of this report, I assume that the NTID students are not part of the class. I exclude those from calculations presented in Section III-B.

7. As I expect to receive more materials from discovery should this class be certified or compelled by the Court as part of the pending discovery dispute, I reserve the right to amend this report when more fulsome information becomes available to me.

**II. Professional Qualifications and Compensation**

8. I have over fifty years of experience in statistical research and design. I received my Bachelor of Arts degree in Economics from the University of Michigan, my Master of Arts degree in Economics from the University of Michigan, and my doctorate in

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Mathematical Statistics from the George Washington University. I currently consult for numerous public and private sector entities on the design, implementation, and evaluation of research, and the synthesis of statistical and sampling techniques for measurement. My professional experience and academic tenure are included in my curriculum vitae, a true and correct copy of which is attached as Exhibit 1.

**A. Professional Experience**

9. I have designed numerous large and complex research programs. These include the Post Enumeration Program for the U.S. Census Bureau to evaluate the Decennial Census, the Economic Cash Recovery valuations conducted by the Resolution Trust Corporation ("RTC"), and evaluation studies conducted for the Department of Justice, the Department of Defense, and the Department of the Treasury.

10. From January 2002 to the present, I have been a Member of Analytic Focus LLC. My firm provides analytic services in the public and private sectors. My firm has multiple projects with the federal government involving audits and other review services. The firm helps businesses and nonprofits optimize their operations and estimate the economic impact of their activities. Included in the firm offerings are expert witness and consulting services in litigation. A list of cases in which I have given expert testimony during the previous four years is attached as Exhibit 2.

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**B. Experience in Academia**

11. I have taught graduate and undergraduate courses in sampling theory, statistics, and computational methods for analysis. I recently retired from my position as Professor in the School of Public Health at the University of Alabama at Birmingham.

12. I also served as an Associate Professor of Statistics at George Washington University from 1993 to 1998, served as a Visiting Research Professor at the Survey Research Laboratory of the University of Illinois from 1983 to 1989, and was on the faculty of the School of Public Health at the University of Alabama Birmingham from 2002 to approximately 2017.

**C. Publications**

13. I have co-authored two books: one on evaluation of survey and census methods, and one on econometric measures related to the welfare of the U.S. economy. I also have written numerous articles on statistical methods, sampling, rare and elusive population research, and optimization techniques. A listing of these publications is included at pages 4 to 7 of my curriculum vitae, attached as Exhibit 1.

**D. Professional Societies**

14. I am a member of the American Statistical Association and have held memberships in other professional societies. My positions on professional committees are listed at page 3 of my C.V., attached as Exhibit 1.

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E. Compensation

15. I am being compensated for my work on this engagement at the rate of \$775 per hour for my time. The payment of my fees is not contingent on the opinions I express in connection with this engagement.

III. Damage Computations

A. Class Member Damages Calculations

16. "Plaintiffs bring this case as a result of Defendant's decision not to issue appropriate refunds for the Spring 2020 semester after canceling in-person classes and changing all classes to an online/remote format"<sup>2</sup> This includes refunds both with respect to tuition and fees.

17. In brief, my calculation of damages, described in the next few paragraphs, is based on a partial allocation of tuition and fees to two time periods: before and after the closure of RIT's campus due to COVID. Prior to the closure of the main campus all services offered by RIT were available and are so credited. After the closure of the campus, only on-line courses were offered, and labs and other fee-based services were not available. However, RIT offers on-line courses at a lower rate, so I apply this rate to course hours to compute what RIT should charge in tuition for on-line offerings. I use these two numbers to compute damages.

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<sup>2</sup> Complaint ¶1.

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18. The Student Financial Services at RIT's website<sup>3</sup> presents the 2022-2023 Tuition and Fees. The Tuition and Fees vary across student cohorts. RIT students are divided into the following four groups: Undergraduate, Graduate, Part Time Programs, and RIT Online (Undergraduate and Graduate). Undergraduate and Graduate students are split up into Part-time, Full-Time, Full-Time with Overload; and Undergraduate Full-Time students are further categorized according to the time in which they entered RIT: Entering Fall '20 and later, Entered between Fall '18 and Summer '20, Entered prior to Fall '18. While in what follows I present formulas with respect to tuition for undergraduate full-time students. These same formulas would apply to other students at RIT.

19. The price of undergraduate tuition for full-time in-person education at RIT for the Spring 2020 semester varied between \$21,323<sup>4</sup> to \$22,622,<sup>5</sup> depending on the cohort the student was part of ("In-person Full-Time Tuition Price"). The price of undergraduate tuition for part-time in-person education (total credit hours below 12) at RIT's main campus for the Spring 2020 semester was \$1,616 per credit ("In-Person Part-Time Tuition Price").<sup>6</sup> These prices were set by RIT and are the prices for which students contracted with RIT. I refer to the In-person Full-Time Tuition Price and In-Person Part-Time Tuition Price together as the In-person Tuition Price.

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<sup>3</sup> <https://www.rit.edu/sfs/tuition-and-fees>

<sup>4</sup> [RIT Undergraduate 2019-2020 Enrolled Prior to Fall 2018 | Student Financial Services \(archive.org\)](https://www.rit.edu/sfs/tuition-and-fees)

<sup>5</sup> [RIT Undergraduate 2019-2020 Entering Fall 2018 and later | Student Financial Services \(archive.org\)](https://www.rit.edu/sfs/tuition-and-fees)

<sup>6</sup> [RIT Undergraduate 2019-2020 Entering Fall 2018 and later | Student Financial Services \(archive.org\)](https://www.rit.edu/sfs/tuition-and-fees)

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20. Likewise, the price for online education at RIT Online per credit hour for an undergraduate student for the Spring 2020 semester was of \$1,034<sup>7</sup> ("Online Tuition Price"). Once more, this is the price RIT set for online credit hours as of Spring 2020 and the price at which undergraduate students that took online classes in RIT Online contracted for.<sup>8</sup>

21. I note that according to RIT's website as of 2019, "RIT Online captures the world-class quality of RIT and customizes it for online learning. RIT's reputable faculty instruct over 30 degree and certificate programs, with hundreds of individual course offerings available each term. Students enrolled in online degree programs benefit from reduced tuition. Graduate students receive a 43% discount and Undergraduate students receive a 36% discount off the standard campus-based rate."<sup>9</sup>

22. In this case, students who initially contracted for on campus and in-person educational services at the RIT's campus received those services for a partial portion of the semester. Then they were moved to online education. For students that contracted for on-campus educational services at the main campus, the Spring 2020 semester started on January 13, 2020 and should have ended on May 6, 2020.<sup>10</sup> On March 15, 2020, however, classes were moved to an online only modality.<sup>11</sup> Thus, for approximately 50%

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<sup>7</sup> [RIT Online 2019-2020 | Student Financial Services \(archive.org\)](https://web.archive.org/web/201907131529/www.rit.edu/admissions/online)

<sup>8</sup> As I stated earlier the pricing structure changes depending on whether a student is an Undergraduate or Graduate student. The formulas I present, however, can be applied in both cases.

<sup>9</sup> <https://web.archive.org/web/201907131529/www.rit.edu/admissions/online>

<sup>10</sup> See Complaint ¶35 – 36.

<sup>11</sup> See Complaint ¶39.

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of the semester the educational services were provided entirely online.<sup>12</sup> I refer to this as the "Online Portion". I refer to remaining portion of the semester or 50% as the "In-Person Portion".

23. Thus, the value of the education that students received could be calculated as follows:

- a) *Part-Time Student = 1 if "yes" or 0 if "no".*
- b) *Full-Time Student = 1 if "yes" or 0 if "no".*
- c) *Value Received In Person Portion = Full-Time Student \* (In-Person Full-time Tuition Price x In-Person Portion) + Part-Time Student \* (In-Person Part-Time Tuition Price x Credit Hours Taken x In-Person Portion)*
- d) *Value Received Online Portion = Online Tuition Price x Credit Hours Taken x Online Portion*
- e) *Total Value Received = Value Received In Person Portion + Value Received Online Portion*

24. From the Total Value Received, I subtract the subsidies or discounts provided by RIT, including scholarships and grants ("RIT Subsidies") to arrive at the "but-for" payment. This is the portion of the value received that the student would have covered from their own pocket or resources. Damages is the difference between the actual payment made by the students and the "but-for" payment.

- f) *Actual Payment = In-Person Tuition Price<sup>13</sup> – RIT Subsidies*
- g) *But For Payment = Total Value Received – RIT Subsidies*
- h) *Amount Overpaid = Actual Payment – But For Payment.*

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<sup>12</sup> See Complaint ¶39.

<sup>13</sup> Note that for part-time students this will be the price per hour times number of credit hours taken.

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25. I summarize this calculation for the Lead Plaintiff Mr. Quattrociovchi (who was a full-time student) in the table below. I can calculate Damages for Mr. Quattrociovchi because Defendants have provided all data points required for him.

**Table 1: Calculation of Tuition Damages for the Lead Plaintiff: Mr. Quattrociovchi**

<b>Description</b>	<b>Dollar</b>
Value Contracted For	\$22,622.0
Online price for total hours taken	\$13,442.0
Value received (in-person portion of semester)	\$11,311.0
Value received (online portion of semester)	\$6,721.0
Value received	\$18,032.0
Total RIT Subsidies	\$2,000.0
But for payment	\$16,032.0
Amounts paid and not subsidized by RIT	\$20,622.0
<b>Amount Overpaid</b>	<b>\$4,590.0</b>
<b>Prejudgement Interest</b>	<b>\$863.4</b>
<b>Damages (Including Pre-Judgement Interest)</b>	<b>\$5,453.4</b>

26. The above calculations can be easily repeated for every member of the putative class. While there may be some differences in the In-Person tuition price arising from differences in the classification of students (e.g., Undergraduate entering the school before or after a certain date, Graduate, in Part-time Programs, etc.),<sup>14</sup> I expect that Defendants will have the In-Person tuition price for each student and will produce it in discovery.

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<sup>14</sup> See supra ¶18.

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27. Likewise, the calculations here can be easily adjusted to account for any partial refunds that have already been issued by RIT. I expect information on refunds, if any, will be provided by Defendants.

28. The Amount Overpaid in paragraph 24-h times  $(1+r)^2$  is approximately the damages incurred by each student plus prejudgment interest. The value  $r$  is an annual interest rate for prejudgment interest set by the court<sup>15</sup>, and the value  $(1+r)$  is squared as the interest is for two years (approximately) since the end of Spring Term 2020. I use the squared amount since the time period will ultimately be established by the court, but the time is approximately two years from May 2020 until the time of this report and discussions between the parties on its contents. I am not saying that the time period should be exactly two years – this is an example. Prejudgment interest is ultimately determined by the court when a judgment is rendered. For now, two years is a good approximation. The sum of this value over all students is the total damages being sought by the plaintiffs.

29. Finally, Plaintiffs also request for reimbursement of fees. However, fees fall into three general categories: activity fees, health services, and lab fees. For students, the lab fee would be dependent on whether a student took a course that would involve some type of lab work. In this case, I would divide lab fees by prorating them into the pre-

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<sup>15</sup> I have been informed by counsel that the rate to be used for interest applicable in this case is 9% per annum, and I will proceed with 9% as an annual rate, but note that my computation is easily changed should the court determine that interest should be computed at a different rate.

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closure period and the post-closure period. Pre-closure fees would remain unchanged, but post-closure fees would be valued as damages at their full amount. For example, for a \$100 lab fee where 50% of the term was pre-closure and 50% was post-closure, the \$50 dollars prorated from the \$100 lab fee would be the damages for a student, as there would be no labs at a closed university. None of these fees can be computed at the present time since this information has not been provided in discovery.<sup>16</sup>

#### B. Estimate of Tuition Damages Calculations Based on Available Data

30. As discussed, at this point Defendants have not produced the detailed information required above for students other than the Lead Plaintiff. Because at this point, I do not have this information I have used other data points I have collected from publicly available sources and Plaintiff's pleadings to provide a rough estimate of damages for undergraduate students with respect to Tuition. The publicly available sources I used were RIT's website and information for RIT available from the National Center for Education Statistics ("NCES") Postsecondary Education Data System ("IPEDS") Survey. Where needed, to supplement for the lack of data I use assumptions.<sup>17</sup>

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<sup>16</sup> As I stated earlier when discussing Tuition damages, I can easily account for any partial refunds that would have been provided for any fees. For each member of the class, I expect Defendants will have and will provide information regarding their fees and any refunds, if any, they would have issued with respect to those.

<sup>17</sup> More details are included in the backup materials (See file "RIT – Aggregate Damages, UG students 20220427.xlsx").

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31. My goal here was to estimate damages for RIT Undergraduates. Thus, I attempt to factor out undergraduate students in NTID and RIT Online programs. I did not have information to do the same for students in Part-Time Programs.

32. I obtained the tuition prices from RIT's Student Financial Services' website as of January 2020.<sup>18</sup>, <sup>19</sup> Tuition prices varied by student cohorts. I use the most conservative value.<sup>20</sup>

33. For full-time students I assume they were registered for an average of 15 credit hours during the Spring 2020. For part-time students, I considered three scenarios in terms of the average number of hours they registered during Spring 2020: 3 credit hours, 6 credit hours, and 9 credit hours.

34. Using this information, I perform the calculation of aggregate damages for undergraduate students along the lines of the methodology outlined in the formulas described in the previous section. I come up with an estimate of class-wide Tuition damages for undergraduate that is between \$28,330,586 and \$29,762,446. When I consider pre-judgement interest the class-wide Tuition damages for undergraduate students is between \$33,659,570 and \$35,360,762.<sup>21</sup>

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<sup>18</sup> [RIT Undergraduate 2019-2020 Enrolled Prior to Fall 2018 | Student Financial Services \(archive.org\)](#)

<sup>19</sup> [RIT Online 2019-2020 | Student Financial Services \(archive.org\)](#)

<sup>20</sup> Once data is produced in discovery, I will be able to know exactly the price each student was charged for tuition.

<sup>21</sup> For calculating pre-judgement interest, I assume compounding interest of 9% for two years.

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35. This calculation will be refined, once I receive the inputs necessary for each of the students as I could apply the formulas utilized to arrive at the damages for Mr. Quattrococchi to all members of the class and sum across them to arrive at a more precise calculation of damages. I will also consider the inclusion of graduate students and additional damages arising from fees that were paid for services that were not rendered at that time.

**IV. Conclusions**

36. As seen in the previous section, there is a viable methodology for computation of damages, the amount can be approximated now using publicly available information and information from Plaintiffs' pleadings, and a methodology is available for refining the estimated damages once discovery is complete.

37. The range of estimates of total tuition damages for undergraduate students produced here, before applying prejudgment interest, is \$28,330,586 to \$29,762,446. When I apply pre-judgement my estimate of damages is between \$33,659,570 and \$35,360,762.

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April 29, 2022  
San Antonio, TX



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Charles D. Cowan, Ph.D.